

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 December 2002 (12.12.2002)

PCT

(10) International Publication Number
WO 02/098480 A3

(51) International Patent Classification⁷: A61M 5/32

(21) International Application Number: PCT/US02/16567

(22) International Filing Date: 5 June 2002 (05.06.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
01226524.1 5 June 2001 (05.06.2001) CN

(71) Applicants and

(72) Inventors: WANG, Hsien, Tsung [—/—]; 6 Floor, No. 31-23, Tung Tsun Road, Tai Ping City, Taichung County (TW). CHEN, Chung, Chin [US/US]; 625 Slaters Lane, 4th Floor, Alexandria, VA 22314 (US).

(74) Agents: KENNEY, Ernest, J. et al.; Bacon & Thomas, PLLC, 625 Slaters Lane, 4th Floor, Alexandria, VA 22314 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

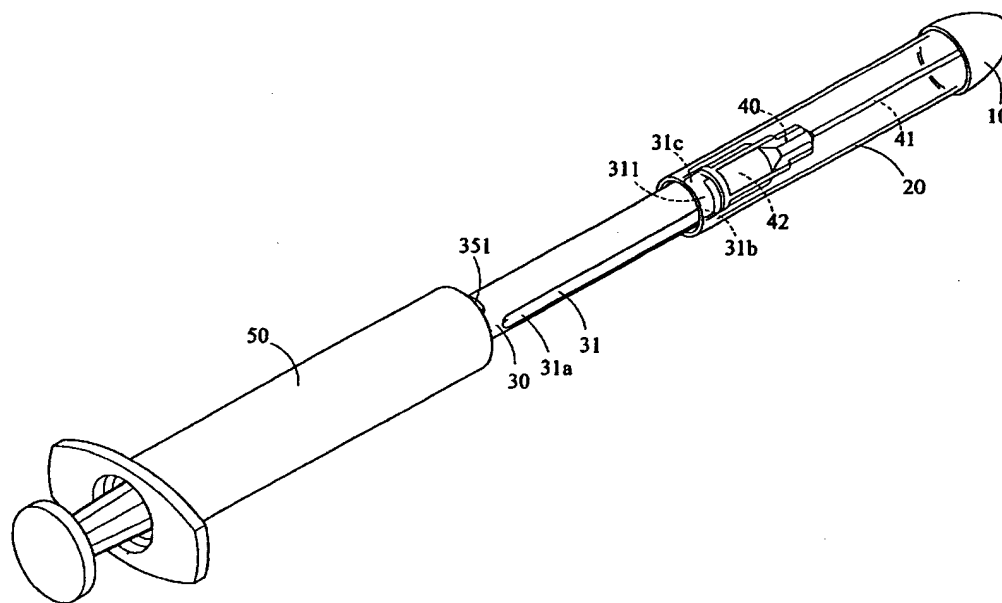
Published:

— with international search report

(88) Date of publication of the international search report:
14 August 2003

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SAFETY SYRINGE



(57) Abstract: A safety syringe (fig. 1) comprising a sleeve (20); a hollow barrel (30) including a front nose (33); a needle (40); and a plunger (50) snugly fitted within and slideable through the barrel (30). After use, the plunger (50) may be pulled to cause the barrel (30) to slide rearward until the needle (40) is received in the sleeve (20) again, thereby preventing a medical worker from being contaminated by microorganisms or blood on needle (20) by being accidentally pricked.

BEST AVAILABLE COPY

WO 02/098480 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/16567

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61M 5/32

US CL : 604/197

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 604/197, 192, 194-196, 198, 218, 263

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,498,243 A (VALLELUNGA et al) 12 March 1996, see entire patent.	1-8
A	US 5,795,336 A (ROMANO et al) 18 August 1998, see entire patent.	1-8
A	US 5,290,255 A (VALLELUNGA et al) 1 March 1994, see entire patent.	1-8
A	US 5,232,457 A (GRIM) 3 August 1993, see entire patent.	1-8
A	US 5,019,051 A (HAKE) 28 May 1991, see entire patent.	1-8
A	US 3,487,834 A (SMITH, JR. et al) 6 January 1970, see entire patent.	1-8



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

01 December 2002 (01.12.2002)

Date of mailing of the international search report

27 MAR 2003

Name and mailing address of the ISA/US

Commissioner of Patents and Trademarks

Box PCT

Washington, D.C. 20231

Facsimile No. (703)305-3230

Authorized officer

Jeremy Thissell

Telephone No. (703) 308-1148